CLAIMS

1. A vacuum pumping system comprising a vacuum pumping arrangement comprising: a drive shaft; a motor for driving said drive shaft; a molecular pumping mechanism comprising turbomolecular pumping means; and a backing pumping mechanism, wherein said drive shaft is for driving said molecular pumping mechanism and said backing pumping mechanism, and the system comprises evacuation means for evacuating at least said turbomolecular pumping means.

2. A system as claimed in claim 1, wherein the vacuum pumping arrangement forms part of a semiconductor processing assembly and said evacuation means comprises a pump associated with said semiconductor processing assembly.

3. A system as claimed in claim 2, wherein said pump is a pump for a load lock chamber of the semiconductor processing assembly.

4. A system as claimed in claim 1, wherein said evacuation means comprises an ejector pump.

5. A system as claimed in any one of claims 1 to 4, wherein the backing pumping mechanism comprises a regenerative pumping mechanism.

6. A system as claimed in any one of the preceding claims, wherein said molecular pumping mechanism comprises molecular drag pumping means.

7. A system as claimed in any one of the preceding claims, wherein said evacuation means is for evacuating the vacuum pumping arrangement.

8. A method of operating a vacuum pumping arrangement comprising: a drive shaft; a motor for driving said drive shaft; a molecular pumping mechanism comprising turbomolecular pumping means; and a backing pumping mechanism, said drive shaft being for driving said molecular pumping mechanism and said backing pumping mechanism, the method comprising the step of operating an evacuation means connected to the arrangement to evacuate at least the turbomolecular pumping means to a predetermined pressure and operating the motor to start rotation of the drive shaft.

9. A method as claimed in claim 8, wherein the motor is operated to start rotation of the drive shaft when said predetermined pressure has been attained.

10. A method as claimed in claim 8, wherein the method comprises: the step of starting the motor before or during evacuating said at least the turbomolecular pumping means to said predetermined pressure and limiting

the torque of the motor to prevent overloading before evacuation; and the step of operating the evacuation means to evacuate at least the turbomolecular pumping means to said predetermined pressure.

11. A method as claimed in any one of claims 8 to 10, wherein the vacuum pumping arrangement forms part of a semiconductor processing assembly having a pump associated therewith which forms said evacuation means, and the method comprises connecting the pump to the arrangement and operating the pump to evacuate at least the turbomolecular pumping means to said predetermined pressure.

12. A method as claimed in any one of claims 8 to 10, wherein the evacuation means comprises an ejector pump and the method comprises connecting said ejector pump to the arrangement and operating the ejector pump to evacuate at least the turbomolecular pumping means to said predetermined pressure.

13. A method as claimed in any one of claims 8 to 12, wherein said vacuum pumping arrangement is evacuated to said predetermined pressure.

14. A method as claimed in any one of claims 8 to 13, wherein said predetermined pressure is 500 mbar or less.